CLAIMS

1. A process for the preparation of a microencapsulated composition containing lipophilic compounds comprising of the following steps:
   (i) Particle size reduction of the lipophilic compound in the presence of a surface active agent;
   (ii) Preparing a solution of alkali metal alginate.
   (iii) Combining the solutions of step (i) and step (ii).
   (iv) Adding dropwise the solution obtained from stage (iii) to a solution containing Ca^{2+}, obtaining beadlets, and removing the formed beadlets from said solution;
   (v) Rinsing the beadlets with an acidic solution and drying;
   (vi) Coating the beadlets obtained from step (v) to obtain the microcapsules.

2. A process according to claim 1, wherein the particle size of the lipophilic compound is reduced to a particle size not greater than 20 μm.

3. A process according to claim 2 wherein the particle size of the lipophilic compound is reducued to a particle size not greater than 10μm.

4. A process according to claim 1, wherein the alkali metal alginate is sodium or potassium alginate.

5. A process according to claim 1 wherein a filler is added to stage (i).

6. A process according to claim 1, wherein the lipophilic compound is selected from among a group comprising of lycopene, beta and alpha-carotene, lutein, astaxanthin, zeaxanthin, vitamin A, vitamin E, vitamin D, omega 3, omega 6 oils and mixtures thereof.

7. A process according to claim 1 wherein a filler is added to stage (ii).

8. A process according to claim 1, wherein the lipophilic-compound-containing alginate beadlets are in the size range of 100 to 425 μm.

9. A process according to claim 1 wherein the acidic solution is an acidic aqueous solution of comprising of an acid selected from among a group comprising of citric, aspartic, acetic, ascorbic, lactic, phosphoric or hydrochloric acid.

10. A process according to claim 1 wherein the coating material is selected from among a group comprising of cellulose derivatives, waxes, fats, proteins and polysaccharides.

11. A process according to claim 10 wherein the cellulose derivative is hydroxypropylcellulose.

12. A process according to claim 1 wherein size reduction of step (i) is carried out in a liquid medium wherein said liquid medium is water or a water miscible liquid.

13. A microencapsulated composition comprising of one or more lipophilic compounds enveloped by a surfactant agent, encapsulated in an alginate matrix and further coated with an outer coating, wherein the particle size of the lipophilic substance is not greater than 20 μm.

14. A composition according to claim 13 wherein the lipophilic compound is selected from among a group comprising of lycopene, beta and alpha-carotene, lutein, astaxanthin, zeaxanthin, vitamin A, vitamin E, vitamin D, omega 3, omega 6 oils and mixtures thereof.

15. A composition according to claim 13 wherein the particle size of the lipophilic compound is not greater than 10 μm.

16. A composition according to claim 15 wherein the particle size not greater than 5 μm.

17. A composition according to claim 13 wherein the size of the microcapsules is in the range of 50 μm to 950 μm.

18. A composition according to claim 17 wherein the size of the microcapsules is in the range of 100 μm to 450 μm.

19. A composition according to claim 13 comprising 0.1% to 40% of a lipophilic compound or mixtures thereof.

20. A composition according to claim 13 wherein the coating is of a material selected from among a group comprising of cellulose derivatives, waxes, fats, proteins and polysaccharides.

21. A composition according to claim 19 wherein the coating is hydroxypropylcellulose.

22. A composition according to claim 13 wherein said composition is tablet grade.

23. A method for incorporating lipophilic compounds in food stuff comprising of encapsulating the lipophilic compound according to the process of claim 1 and adding the encapsulated composition to food stuff.

24. A method for masking the flavor and/or smell of lipophilic compounds comprising encapsulating the lipophilic compound according to the process of claim 1.